

5/45

Split #1

DART AEROSPACE LTD	Work Order:	24595-1
Description: Blade	Part Number:	D2741
04.03.03 <i>UP</i>		
Drawing: D2741 Rev. B2	Qty:	12 14

Step	Location	Procedure	By	Date	Qty
1	EXPEDITING	Issue Work Order	<i>SA</i>	05.10.18	10
2	METAL	Cut blanks 13.850" long +0.063" -0.000" Material: 4130 steel bar 0.50" x 3.00" Batch: <i>M/8768</i>	<i>SG</i>	05.11.02	36
3	CNC CELL	Machine per folio FA108 <i>M/420</i>	<i>SD</i>	05.11.05	36
4	QC	Inspect Level 2	<i>SD</i>	05.11.05	36
5	QC	Inspect Level 8	<i>SG</i>	05.11.11	36
6	METAL	Deburr	<i>SP</i>	06/11/18	36
7	METAL	Bend per Dwg D2741	<i>SB</i>	05/11/21	36
8	QC	Inspect Level 5	<i>Z</i>	05.11.25	36
9	PURCHASING	Issue P/O: <i>00000218</i> Harden material as per Dwg D2741 Min. Ultimate Tensile Strength = 152 ksi (34-40 HRC) Min. Yield Tensile Strength = 141 ksi Test report or Certification required	<i>AP</i>	05/12/05	36
10	RECEIVING	Receive and Inspect for transit damage Ensure Test report or Certification attached -	<i>1</i>	05/12/20	36
11	QC	Inspect Level 5	<i>1</i>	05.12.21	36
12	FINISHING	Powder Coat White (Ref. 4.3.5.2) per QSI 005 4.3	<i>ML</i>	06/01/04	14
13	QC	Inspect Level 3	<i>CL</i>	06/01/04	14
14	STORES	Identify and stock <i>Loc 103</i>	<i>AB</i>	06/01/04	14
15	EXPEDITING	Close W/O Cost / part <i>545 06/01/06</i> <i>(14)</i>	<i>AP</i>	06/01/06	14

Rev	Date	Change	Revised By	Approved
A	98.09.10	New Issue	DS/CP	
B	99.03.22	Material hardened after counterbore	DM	
C	00.11.01	Removed P/O for Powder Coat - in house process	EC	
D	00.11.15	Removed P/O turning - in house process	EC	

RELEASED

EC 00.11.20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector
		Please remove 2.000" D.m. of D.m. sheet. cannot measure.					

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			
05.11.04	3	THICKNESS OF SOME PIECES VARY, FROM ABOUT 0.400" IN CENTER TO 0.347" AT TIP	CP	PARTS OK		2 15-11-04	4 05.11.04 Per QSI 042	2 05-11-04

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: DF Date: 06/01/06

NOTE: Date & initial all entries

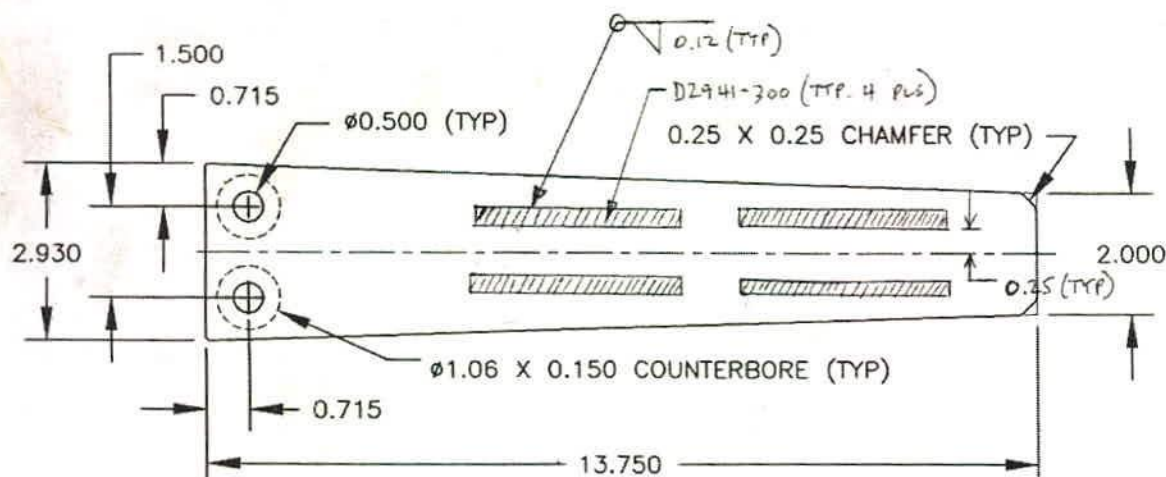
QA: N/C Closed: _____ Date: _____

DART

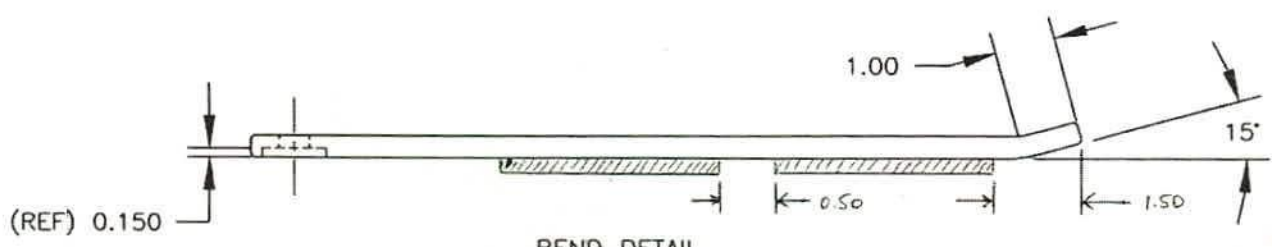


RELEASED
18.11.03 DS

DESIGN	DRAWN BY	DART AEROSPACE USA, INC.	REV. B
11	11	FAIRCHILD INTERNATIONAL AIRPORT, WA	
CHECKED	APPROVED	DRAWING NO.	SHEET 1 OF 1
11	11	D2741	
DATE	TITLE	SCALE	
98.09.01	BLADE	1:3	
A	98.04.16	NEW ISSUE	
B	98.09.01	CHANGE C'SINK TO C'BORE	
B1	01.01.31	KDD 2941-041/-043 OPNONS	
B2	01.02.25	ADD ROCKWELL HARDNESS	



FLAT PATTERN



BEND DETAIL

MATERIAL: AISI 4130 STEEL 0.375 THICK
 MIN. ULTIMATE TENSILE STRENGTH = 152 ksi (34-40 HRC)
 MIN. YIELD TENSILE STRENGTH = 141 ksi
 FINISH: POWDER COAT WHITE (REF. 4.3.5.2) PER DART QSI 005 4.3
 TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 BREAK ALL SHARP EDGES 0.030 TO 0.060

TO MAKE D2741-041, WELD 2941-300 (4) AS SHOWN ABOVE. REMOVE POWDER COAT FROM SURFACE OF D2941-300
 TO MAKE D2741-043, WELD 7560 HARDCOAT ROD INSTEAD OF D2941-300

#01.02.25
#01.02.26
B2

WORK ORDER

NO. 24595

Job Costing Report

Dart Aerospace Ltd.
Hawkesbury

Oct 18, 2005
11:00 am

Work Order No : 0024595
Project Name : D2741
Project For : WK545
Work Order Type : Main
Main WO Number :
House Part Number : D2741
Description : Blade
Manufactured : Yes
Amount Req'd : 10
Amount Done : 0
Start Date : 10-18-05
Est Finish Date : 11-12-05
Act Finish Date :
Drawings Req'd : No
Ok for Approval :
Approval Rec'd :

Department Code:
Burden Flags : NNNNNNNN
WO Status : Open
Invoice State : Not Invoiced
Invoice Date :
Invoice Number :
Invoice Amount : 0.00

Order Entry No :
OE Value : 0.00

Est Mark Up : 0.000%
Actual Mark Up : 0.000%

\$0 Posted to Finished Goods

	Estimated	Actual	Var. %	Posted	To Post
Material Cost :	0.00	0.00	0.00	0.00	0.00
Engineering Hours :	0.00	0.00	0.00		
Engineering Cost :	0.00	0.00	0.00	0.00	0.00
Production Hours :	0.00	0.00	0.00		
Production Cost :	0.00	0.00	0.00	0.00	0.00
Packaging Hours :	0.00	0.00	0.00		
Packaging Cost :	0.00	0.00	0.00	0.00	0.00
OverHead Hours :	0.00	0.00	0.00		
OverHead Cost :	0.00	0.00	0.00	0.00	0.00
CNC Hours :	0.00	0.00	0.00		
CNC :	0.00	0.00	0.00	0.00	0.00
Misc. Hours :	0.00	0.00	0.00		
Misc. :	0.00	0.00	0.00	0.00	0.00
Burden :	0.00	0.00	0.00		
Total Cost :	0.00	0.00	0.00		
Mark up :	0.000	0.000			
Selling Cost :	0.00	0.00			

	Estimated	Actual
Labour Hrs/Amount Done :	0.00	0.00
Profits/(Loss) :	0.00	0.00

Chris Provencal

From: David Shepherd [davids@dartaero.com]
Sent: November 3, 2005 5:25 PM
To: Chris Provencal
Subject: Re: blade fitting

Chris,

Because this part is thin at the end where the moments are low, I think it is an acceptable deviation.

David

----- Original Message -----

From: "Chris Provencal" <cprovencal@dartaero.com>
To: <davids@dartaero.com>
Sent: Thursday, November 03, 2005 8:40 AM
Subject: blade fitting

>
> Dave,
>
> D2741 blade for the 350 skidtube. The thickness should be 0.375". The
> thickness of one is kind of like a banana: 0.375" at holes, 0.400" at
> center, and 0.347" at the end.
>
>
> Sincerely,
> Chris Provencal
> DART Aerospace Ltd.
> Email..cprovencal@dartaero.com
> Phone...613-632-3336
> Fax.....613-632-4443
>
>



VAC AERO
INTERNATIONAL INC.

PACKING SLIP

OAK 70831-1



HEAD OFFICE
1371 SPEERS ROAD, OAKVILLE, ONTARIO
CANADA L6L 2X5
TEL: (905) 827-4171 FAX: (905) 827-7489



QUEBEC DIVISION
7450 RUE VERITÉ STREET, ST. LAURENT, QUÉBEC
CANADA H4S 1C5
TEL: (514) 334-4240 FAX: (514) 334-6269

GST No.: R105468102

12/16/2005

MM / DD / YYYY

PAGE: 1

1DAR01

BILL TO: DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY, ON

SHIP TO: DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY, ON

K6A 1K7

K6A 1K7

DATE SHIPPED	SHIP VIA	F.O.B.
12/16/2005		ORIGIN
CUSTOMER P/O No.	JOB No.	TERMS
0218		COD

LN	PART NO	DESCRIPTION	UOM	QTY ORDERED	QTY SHIPPED	B/O QTY
01	D2741	BLADE ✓ Process Specifications: Procedure: 4161 HARDENED PER DWG. D2741 TO 152 KSI MINIMUM HRC 34-40 MATERIAL: 4130 <i>15/12/20</i> <i>F-5-12-21</i>	EA	36	36	0
02	mc	MINIMUM CHARGE 130 lbs @ \$2.20/lb		1	1	0

No claims for shortage in weight or count will be entertained, unless presented within 5 working days after receipt of materials by customer.



VACUUM BRAZING - HEAT TREATING - SPECIAL PROCESSING - FURNACE EQUIPMENT





RELEASE NOTE

GST No.: R105468102

OAK 70831-1

HEAD OFFICE
371 SPEERS ROAD, OAKVILLE, ONTARIO
CANADA L6L 2X5
TEL: (905) 827-4171 FAX: (905) 827-7489

2009 WYECROFT ROAD, UNIT B
OAKVILLE, ONTARIO
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7450 RUE VÉRITÉ STREET, ST. LAURENT, QUÉBEC
CANADA H4S 1C5
TEL: (514) 334-4240 FAX: (514) 334-6269

12/16/2005

MM / DD / YYYY

PAGE: 1

TO: 1DAR01
DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY, ON

SHIP TO: DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY, ON

K6A 1K7

K6A 1K7

DATE SHIPPED	SHIP VIA	F.O.B.
12/16/2005		ORIGIN
CUSTOMER P/O No.	JOB No.	TERMS
0218		COD

PART No.	DESCRIPTION	UOM	QTY ORD	QTY SHPD	TEST RESULTS
D2741	BLADE	EA	36	36	
Process Specifications: Procedure: 4161 HARDENED PER DWG. D2741 TO 152 KSI MINIMUM HRC 34-40 MATERIAL: 4130					
<div>100% HARDNESS TESTED 36 PCS 37/38 HRC RA V.A.I.O. TH. 25 Q.C. JOS-12-21</div>					

I hereby certify that the material covered by this release note has been inspected and tested and conforms to all specifications relevant thereto in accordance with the conditions of the contract / or purchase order.

ON BEHALF OF VAC AERO INTERNATIONAL INC.

Jaura Freeman
Authorized Q.C. Inspector

V.A.I.O.
TH.
25
Q.C.HEAT
TREATING

VACUUM BRAZING · HEAT TREATING · SPECIAL PROCESSING · FURNACE EQUIPMENT
TURBINE COMPONENT OVERHAUL · PLASMA AND OTHER COATINGS